

Amendments to the Drawings

The attached drawing sheet includes changes to Figure 3. This drawing sheet replaces the original drawing sheet that included Figure 3.

In Figure 3, a reference number "310" along with its corresponding lead lines have been inserted near input interface 320. Additionally, a reference number "350" along with its corresponding lead lines have been inserted near output interface 340.

Attachment: 1 Replacement Drawing Sheet

REMARKS

Claims 1, 4-10, 12, 15-19 and 22-25 are rejected. Claims 1, 4-10, 12, 15-19 and 22-25. Applicants respectfully request further examination and reconsideration in view of the remarks set forth below. Applicants believe that the amendments herein to the patent application do not add new matter to it.

35 U.S.C. §103 Rejections

Claims 1, 4, 5, 10, 15, 16, 19 and 22-25 are rejected under 35 U.S.C. §103(a) as being unpatentable over McCloghrie et al., U.S. Patent No. 6,920,112 (hereinafter McCloghrie) in view of Genrich, U.S. Patent No. 5,596,609 (hereinafter Genrich). Claims 8 and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of McCloghrie and Genrich as applied to Claim 1, and further in view of Dean, U.S. Patent No. 6,442,585 (hereinafter Dean). Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of McCloghrie and Genrich as applied to Claim 10, and further in view of Dean. Claims 6 and 7 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of McCloghrie and Genrich as applied to Claim 1, and further in view of Chen, U.S. Patent No. 6,658,006 (hereinafter Chen). Claims 17 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of McCloghrie and Genrich as applied to Claim 10, and further in view of Chen.

Claims 1, 4 and 5

Applicants respectfully direct the Examiner to amended independent Claim 1 that recites an embodiment of the invention (emphasis added):

A network device comprising:

 a central processing unit (CPU), wherein said CPU is integrated within said network device;

 an input interface for receiving a plurality of packets coupled to said CPU, said input interface comprising at least one input port wherein at least one said input port is configured to sample at least one input packet and transmit a sampled input packet to said CPU, wherein at least one said input port comprises a countdown register, and wherein said input port is configured to sample a packet according to said countdown register;

 an output interface for transmitting a plurality of packets coupled to said CPU, said output interface comprising at least one output port wherein at least one said output port is configured to sample at least one output packet and transmit a sampled output packet to said CPU, wherein said input interface and

said output interface feed into said CPU, wherein at least one said output port comprises a countdown register, and wherein said output port is configured to sample a packet according to said countdown register; and

a switching fabric coupled to said input interface and said output interface, said switching fabric configured to transmit a packet between said input interface and said output interface.

Applicants respectfully contend that McCloghrie and Genrich, alone or in combination, fail to teach or suggest the above recited combination of elements as recited in amended independent Claim 1. For example, Applicants respectfully assert that McCloghrie and Genrich do not teach or suggest "a central processing unit (CPU), wherein said CPU is integrated within said network device" as recited in amended Claim 1. In particular, Applicants respectfully contend that McCloghrie and Genrich are silent as to a "central processing unit" or a "CPU". Furthermore, Applicants respectfully assert that McCloghrie and Genrich fail to teach or suggest "at least one said input port comprises a countdown register" as recited in amended Claim 1. Moreover, Applicants respectfully contend that McCloghrie and Genrich fail to teach or suggest "at least one said output port comprises a countdown register" as recited in amended Claim 1. Specifically, Applicants respectfully contend that McCloghrie and Genrich are silent as to a "countdown register".

Therefore, since McCloghrie and Genrich, alone or in combination, fail to teach or suggest elements as recited in amended independent Claim 1, Applicants respectfully submit that amended independent Claim 1 overcomes the rejections under 35 U.S.C. §103(a), and is thus in condition for allowance.

With respect to Claims 4 and 5, Applicants respectfully point out that Claims 4 and 5 depend from allowable amended independent Claim 1 and recite further embodiments of the present claimed invention. Therefore, Applicants respectfully submit that Claims 4 and 5 overcome the rejections under 35 U.S.C. §103(a), and that these claims are thus in a condition for allowance as being dependent on an allowable base claim.

Claims 10, 15 and 16

Applicants respectfully direct the Examiner to amended independent Claim 10 that recites an embodiment of the invention (emphasis added):

A method of sampling a packet comprising:

receiving a plurality of packets at an input network circuit of a network device, said input network circuit comprising at least one input port;

sampling at least one input packet at said input port, wherein said sampling comprises using a countdown circuit;

transmitting at least one sampled input packet to a processor of said network device, wherein said processor is integrated within said network device;

transmitting at least one packet from said input network circuit to an output network circuit of said network device over a switching fabric of said network device, said output network circuit comprising a plurality of output ports, wherein said input network circuit and said output network circuit feed into said processor;

sampling multiple output packets simultaneously at said plurality of output ports, wherein said sampling comprises using a plurality of countdown circuits, wherein each of said plurality of output ports comprises one of said plurality of countdown circuits; and

transmitting at least one sampled output packet to said processor.

Applicants respectfully contend that McCloghrie and Genrich, alone or in combination, fail to teach or suggest the above recited combination of elements as recited in amended independent Claim 10. For example, Applicants respectfully assert that McCloghrie and Genrich do not teach or suggest "wherein said sampling comprises using a plurality of countdown circuits, wherein each of said plurality of output ports comprises one of said plurality of countdown circuits" as recited in amended Claim 10.

Therefore, since McCloghrie and Genrich, alone or in combination, fail to teach or suggest elements as recited in amended independent Claim 10, Applicants respectfully submit that amended independent Claim 10 overcomes the rejections under 35 U.S.C. §103(a), and is thus in condition for allowance.

With respect to Claims 15 and 16, Applicants respectfully point out that Claims 15 and 16 depend from allowable amended independent Claim 10 and recite further embodiments of the present claimed invention. Therefore, Applicants respectfully submit that Claims 15 and 16 overcome the rejections under 35 U.S.C. §103(a), and

that these claims are thus in a condition for allowance as being dependent on an allowable base claim.

Claims 19 and 22

Applicants respectfully direct the Examiner to amended independent Claim 19 that recites an embodiment of the invention (emphasis added):

A network device for sampling a packet comprising:

processing means, wherein said processing means is integrated into said network device;

means for receiving a plurality of packets over a network, said means for receiving a plurality of packets comprising an input means for sampling at least one packet and transmitting a sampled incoming packet to said processing means, said means for receiving a plurality of packets coupled to said processing means;

means for transmitting a plurality of packets over said network, said means for transmitting a plurality of packets comprising a plurality of output means for each sampling at least one packet and transmitting a sampled outgoing packet to said processing means, said means for transmitting a plurality of packets coupled to said processing means, wherein said means for receiving a plurality of packets of said network and said means for transmitting a plurality of packets over said network feed into said processing means, wherein each of said plurality of output means comprises a countdown means, wherein each of said plurality of output means is configured to sample a packet of said plurality of packets according to its countdown means, wherein at least one said input means comprises a countdown means, and wherein said input means is configured to sample a packet of said plurality of packets according to said countdown means; and

switching means coupled to said means for receiving a plurality of packets and said means for transmitting a plurality of packets, said switching means for transmitting a packet between said means for receiving a plurality of packets and said means for transmitting a plurality of packets.

Applicants respectfully contend that McCloghrie and Genrich, alone or in combination, fail to teach or suggest the above recited combination of elements as recited in amended independent Claim 19. For example, Applicants respectfully assert that McCloghrie and Genrich do not teach or suggest "each of said plurality of output means comprises a countdown means, wherein each of said plurality of output means is configured to sample a packet of said plurality of packets according to its countdown means" as recited in amended Claim 19.

Therefore, since McCloghrie and Genrich, alone or in combination, fail to teach or suggest elements as recited in amended independent Claim 19, Applicants respectfully submit that amended independent Claim 19 overcomes the rejections under 35 U.S.C. §103(a), and is thus in condition for allowance.

With respect to Claim 22, Applicants respectfully point out that Claim 22 depends from allowable amended independent Claim 19 and recites a further embodiment of the present claimed invention. Therefore, Applicants respectfully submit that Claim 22 overcomes the rejections under 35 U.S.C. §103(a), and that this claim is thus in a condition for allowance as being dependent on an allowable base claim.

Claims 23-25

Applicants respectfully direct the Examiner to amended independent Claim 23 that recites an embodiment of the invention (emphasis added):

A network device comprising:

- a switching fabric;
- an input interface coupled to said switching fabric, said input interface comprising a plurality of input ports;
- an output interface coupled to said switching fabric, said output interface comprising a plurality of output ports;
- a computer-readable memory coupled to said input interface and said output interface; and
- a microcontroller coupled to said input interface and said output interface, wherein said microcontroller is integrated into said network device, wherein said input interface and said output interface feed into said microcontroller, said microcontroller for executing a method of sampling a packet, said method comprising:
 - sampling at least one incoming packet received at one of said plurality of input ports, wherein each of said plurality of input ports comprises a countdown register;
 - transmitting said sampled incoming packet to said microcontroller;
 - transmitting at least one packet from said input interface to said output interface over said switching fabric;
 - sampling at least one outgoing packet at one of said plurality of output ports, wherein each of said plurality of output ports comprises a countdown register; and
 - transmitting said sampled outgoing packet to said microcontroller.

Applicants respectfully contend that McCloghrie and Genrich, alone or in combination, fail to teach or suggest the above recited combination of elements as recited in amended independent Claim 23. For example, Applicants respectfully assert that McCloghrie and Genrich do not teach or suggest "wherein each of said plurality of input ports comprises a countdown register" as recited in amended Claim 23. Furthermore, Applicants respectfully contend that McCloghrie and Genrich do not teach or suggest "wherein each of said plurality of output ports comprises a countdown register" as recited in amended Claim 23.

Therefore, since McCloghrie and Genrich, alone or in combination, fail to teach or suggest elements as recited in amended independent Claim 23, Applicants respectfully submit that amended independent Claim 23 overcomes the rejections under 35 U.S.C. §103(a), and is thus in condition for allowance.

With respect to Claims 24 and 25, Applicants respectfully point out that Claims 24 and 25 depend from allowable amended independent Claim 10 and recite further embodiments of the present claimed invention. Therefore, Applicants respectfully submit that Claims 24 and 25 overcome the rejections under 35 U.S.C. §103(a), and that these claims are thus in a condition for allowance as being dependent on an allowable base claim.

CONCLUSION

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims and respectfully solicit allowance of these claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present application.

Respectfully submitted,
MURABITO, HAO & BARNES LLP

A handwritten signature in black ink, appearing to read 'Thomas M. Catale', is written over a horizontal line.

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Dated: APRIL 20, 2007